ABSTRACT

Title Comparative analysis of chosen muscles in locomotion through shoulder girdle

Objectives: The aim of this study is to describe and to compare selected exercises performer during indoor training toward the canoe forward stroke.

Methods: The research was conducted in an intentionally chosen sample of ten probands with high level of performance in whitewater slalom. We watched activity of ten selected muscles during canoe forward stroke, on simulator, diagonal pull, stretch of arms with elastic resistance, dumbbell pulls and pull ups by surface electromyography. Study evaluates intraindividual and subsequently interindividual the size of the muscle activation considering reference movement, forward stroke on flat water.

Results The results proved similarities of the forward stroke and on simulator in terms of average muscle activation. M. latissimus dorsi shows higher activation during canoe forward stroke, on simulator, stretch of arms with elastic resistance, dumbbell pulls compared with other tested exercices.

Key words locomotion through the shoulder girdle, shot, canoeing, paddling, electromyography, muscular activity